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September 15, 2017

VIA ELECTRONIC & US MAIL

Ms. Jennifer LaPoma
ATTN: Lower Passaic River Remedial Project Manager
Emergency and Remedial Response Division
U.S. EPA, Region 2
290 Broadway, 19th Floor
New York, New York 10007

Re: Monthly Progress Report No. 124 – August 2017

Lower Passaic River Study Area (LPRSA) Remedial Investigation/Feasibility Study

(RI/FS)

CERCLA Docket No. 02-2007-2009

Dear Ms. LaPoma:

de maximis, inc. is submitting this Monthly Progress Report for the above-captioned project on the behalf of the RI/FS Agreement Settling Parties (Cooperative Parties Group or CPG) pursuant to the Administrative Settlement Agreement and Order on Consent (Settlement Agreement or AOC). The Progress Report satisfies the reporting requirements of Paragraph 42 of said Settlement Agreement. The CPG has revised this Progress Report to address the Region's direction in its September 1, 2015 letter about Section (d).

(a) Actions which have been taken to comply with this Settlement Agreement during the previous month.

Meetings/Conference Calls

- On August 11, EPA Region 2 (Region 2), CPG and Region 2 and CPG consultants held a conference call to discuss the status of Organic Carbon model refinements.
- On August 15, Region 2 and CPG held a conference call to discuss the status of the Contaminant Fate and Transport (CFT).
- On August 17, Region 2 and CPG met to continue discussion of the CPG's Upper 9-mile Plan.

Correspondence

 On August 1, Region 2 provided an update to CPG regarding when Region 2 would be providing feedback on the revised Draft 17-mile Baseline Ecological Risk Assessment (BERA) and information regarding the derivation of Toxicity Reference Values (TRVs) in the Focused Feasibility Study (FFS). Ms. J. LaPoma LPRSA RI/FS - Progress Report No. 124 – August 2017 September 15, 2017 Page 2 of 8

- On August 2, Region 2 asked CPG if it was considering the potential development of a BERA chapter or exposure areas focused on the upper 9 miles.
- On August 2, Region 2 requested CPG input regarding scheduling a follow-up meeting related to the proposal of an interim remedy.
- On August 3, CPG provided a list of potential dates to Region 2 for a meeting related to the proposal of an interim remedy and a schedule for submitting the remedial action limit (RAL) Technical Basis Statement requested by Region 2.
- On August 3, CPG submitted files to Region 2 with the remaining TRV's requested by Region 2.
- On August 3, Region 2 responded to CPG suggesting August 17 as a potential meeting date to discuss the proposal of an interim remedy.
- On August 4, CPG notified Region 2 that the RAL Technical Basis Statement was still in development.
- On August 7, CPG consultants requested input from Region 2 regarding scheduling a call to discuss refinements to the Organic Carbon model per comments on the Draft 17-mile Remedial Investigation (RI) report.
- On August 8, Region 2 confirmed August 17 and provided a list of meeting attendees to CPG to discuss the proposal of an interim remedy.
- On August 8, Region 2 suggested August 18 to CPG as a potential date for a conference call to discuss the CFT model.
- On August 8, Region 2 provided CPG a table of sediment depth readings and a figure showing ERT sediment sampling locations, and ERT September 2015 sediment sampling results as follow-up materials to the July 26 Draft 17-mile RI Report comment call.
- On August 8, CPG submitted a list of BERA meeting action items from the July 24 meeting to Region 2.
- On August 8, CPG submitted the Technical Basis for Phase 1 RALs memorandum to Region 2.
- On August 11, CPG submitted proposed text for the Mullica River Freshwater data, the proposed BERA Multivariate Approach and the background data memo for the BERA to Region 2 per action items identified in the July 24 meeting.
- On August 15, CPG submitted responses to Region 2's July 24 questions and statements regarding the Upper 9-mle Plan to Region 2.
- On August 15, CPG consultants submitted slides to Region 2's modeling oversight consultants regarding Organic Carbon model refinements.
- On August 15, CPG delivered the July Monthly Progress Report to Region 2
- On August 15, CPG delivered responses to Region 2 on the 2016 Draft 17-mile BERA comments related to salinity zones from Region 2.
- On August 15, CPG presented findings to Region 2 regarding species sensitivity distributions (SSDs) curves in the Draft 17-mile BERA.
- On August 15, CPG confirmed that the action items identified in the July 24 meeting have been submitted to Region 2.

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- On August 15, Region 2 requested information from CPG on the proposed approach for evaluating exposure areas in the upper 9 miles.
- On August 15, Region 2 requested a detailed description of how the lead and zinc Biotic Ligand Model (BLM) values in the Draft 17-mile BERA were developed from CPG.
- On August 16, CPG provided a compressed archive containing the code and inputs for the organic carbon model to Region 2.
- On August 16, Region 2 requested CPG provide an outline of the changes made since the March 29, 2017 submission with the revised Hydrodynamic/Sediment Transport (HST) and Organic Carbon models to be submitted in September.
- On August 22, Region 2 requested an update on the schedule for CPG's submittal of the detailed description of how the lead and zinc BLM values in the Draft 17-mile BERA were developed.
- On August 22, Region 2 requested the values and supporting documentation for the SSD curves from CPG.
- On August 23, CPG provided Region 2 the surface water BLM-based TRV memorandum.
- On August 23, CPG submitted a memorandum on the re-evaluation of benthic invertebrate and fish tissue SSDs to Region 2.
- On August 23, Region 2 approved the revised Draft 17-mile Baseline Human Health Risk Assessment (BHHRA).
- On August 29, Region 2 requested clarification from CPG regarding the Upstream Reference Benthic Data Report and the Background Sediment Data Report identified in monthly CPG progress reports as awaiting Region 2 approval or comment.
- On August 30, Region 2 provided responses to the surface water BLM-based TRV memorandum to CPG.
- On August 31, Region 2 provided comments to CPG regarding the potential schedule for deliverables and review periods associated with potential Upper 9-mile Plan submittals.
- On August 31, CPG responded to Region 2 comments regarding the potential schedule for deliverables.

Work

- CPG continued to work on addressing to Region 2's comments on the revised Draft 17mile RI Report and Model Appendices.
- CPG continued work on calibration of the revised LPR/Newark Bay CFT model.
- CPG continued work to address Region 2's June 30 comments on the revised Draft 17mile BERA.
- CPG continued work on preliminary identification and evaluation of Upper 9-mile remedial alternatives

(b) Results of Sampling and Tests

None.



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(c) Work planned for the next two months with schedules relating to the overall project schedule for RI/FS completion

- CPG will continue work on the revised Draft 17-mile RI Report and Model Appendices in response to Region 2 comments with an anticipated delivery in late December 2017.
- CPG will continue calibration of the revised LPR/Newark Bay CFT model with anticipated delivery in late September 2017.
- CPG will revise the Draft 17-mile BERA to address Region 2 comments and the July 24
 meeting discussions with an anticipated delivery in late November 2017.
- CPG will continue preliminary identifications of remedial alternatives for the upper 9-miles.

(d) <u>Problems encountered and anticipated problems, actual or anticipated delays, and solutions developed and implemented to address actual or anticipated problems or delays.</u>

The CPG has agreed to retain only near-term problems and concerns in the monthly reports moving forward pursuant to the direction in Region 2's September 1, 2015 letter; however, previous Progress Reports through July 2015 document in Section (d) significant issues and matters largely the result of actions and decisions by the Region and its Partner Agencies that have significantly delayed and complicated the completion of the 17-mile RI/FS. The removal of this previous information does not in any way lessen its impact on the completion of the 17-mile RI/FS.

- Remedial Investigation (RI) Report The CPG submitted the Draft 17-mile RI Report over one year ago on February 18, 2015. The CPG inquired about the status of the draft 17-mile RI Report during the February 17, 2016 COPC Mapping meeting and Region 2 was unable to provide a definitive date to deliver comments on the draft report. Region 2 provided 618 comments on the Draft 17-mile RI Report and LPRSA Models on April 14, 2016. The extended delay by the Region in providing the comments was beyond the control of the CPG and will further delay the completion of the 17-mile RI/FS. The Region and the CPG are in the process of comment review and resolution and provide preliminary responses to comments within 60 days as directed by the Region in its July 14, 2016 email. The CPG delivered responses to Region 2 non-modeling Draft RI Report comments on September 13, 2016. The CPG delivered responses to the EPA's RI Report modeling comments on February 9, 2017. The CPG received EPA's evaluation of the CPG's September 2016 responses to comments on April 26. The July 26 teleconference identified outstanding comments and potential resolution. The CPG delivered a draft of RI Report Section 4 - Reachby-Reach Analysis for the Upper 9-Mile Plan to EPA on August 31. The CPG will continue revisions to the Draft 17-mile RI Report.
- Feasibility Study (FS) The CPG delivered the Draft FS over 2 years ago on April 30, 2015. The Region stated in its August 4, 2016 RAO/PRG Technical Memorandum comments it has decided not to provide comments on the Draft FS. In addition, Region 2 provided comments on the Draft RAO/PRG Technical Memorandum (submitted on

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> March 27, 2015), Draft Alternatives Screening Technical Memorandum (submitted on April 16 and 21, 2015) and the Draft Alternatives Evaluation Technical Memorandum (submitted on April 26, 2015). Region 2 provided comments on August 4, 2016 after more than 16 months for the RAO/PRG Technical Memorandum and informed the CPG that comments on the remaining two Technical Memoranda will be provided by the end of September. The CPG provided a preliminary response to comments to the Region's RAO/PRG Technical Memorandum comments on September 6. Region 2 provided comments on the Draft Alternative Screening Technical Memorandum and the Draft Alternatives Evaluation Technical Memorandum on September 29, 2016 -17 months after delivery of the memoranda. The CPG prepared and delivered responses on December 2, 2016 as directed by Region 2. The extended delay by the Region in providing the comments on the FS technical memoranda is beyond the control of the CPG and will further delay the completion of the 17-mile RI/FS. The CPG provided two suggested streamlining options to Region 2 on March 10, 2017 and offered a series of collaboration meetings to support this approach Region 2 and the CPG are currently discussing refocus of the FS to the Upper 9-miles and accelerating its completion.

- Baseline Human Health Risk Assessment (BHHRA) –The CPG delivered a second revision to the Draft 17-mile BHHRA on March 1, 2017 to the Region. The Region provided additional comments on the second revision to the CPG on June 14, 2017. The CPG delivered the Final 17-mile BHHRA on July 24, 2017 which EPA approved on August 23, 2017.
- Baseline Ecological Risk Assessment (BERA) The CPG submitted the Draft 17mile BERA on June 13, 2014 and the Region provided comments on May 1, 2015. The CPG and the Region conducted several teleconferences and exchanged correspondence throughout May and July 2015. The last teleconference was conducted on July 29, 2015, during which the Region requested the CPG provide a list of action items. The action items were provided on July 30 and included three items for Region 2 and one item for the CPG that required the Region's input. The Region provided its response to these two of these action items on December 22. The CPG provided Draft 17-mile BERA responses to comments (RTCs) on September 11, 2015 and additional material on September 15, 2015; the Region stated in its July 20. 2015 letter that it would provide its responses in 30 days - Region 2's responses were received in part on December 22, 2015 - more than two months later than promised. The Region provided the remaining material on January 5, 2016. The Region and CPG conducted a teleconference to clarify a number of issues on January 13, 2016. The CPG received additional Mullica River and Great Bay reference data from the Region 2 on June 7, 2016 which was heretofore not available to the CPG which addresses the CPG's concerns about this reference data set. The Region provided further statements on June 20, 2016 with respect to common carp that did not resolve the inconsistent comments and previous statements by the Region (Dec. 2015 BERA Comment 3 Response and RI Comment 179). The Region and CPG communicated

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> via emails, a July 6, 2016 telephone call and the CPG's July 18, 2016 letter to the Region discussing the revised Draft 17-mile BERA schedule and outstanding issues. As discussed in CPG's July 11, 2016 email and July 18, 2016 letter, the CPG anticipates that it will take until October 1, 2016 to deliver a revised Draft 17-mile BERA based on the extensive changes that the Region has directed, delays in providing the additional reference data and assuming the remaining matter of common carp in the Draft 17-mile BERA are quickly resolved. The Region agreed to an October 1 (actual delivery will be on October 3 since October 1 is a Saturday) delivery date in its August 4, 2016 letter. The CPG delivered a set of clarifications regarding the Draft 17-mile BERA on September 12, 2016 and received responses from the Region on September 27, 2016; the CPG disagrees with the Region's contention that these were previously resolved by earlier communications. Thereafter, on October 3, 2016, Region 2 refused a CPG request for a brief extension for the delivery of the revised Draft 17-mile BERA. The revised Draft BERA was submitted on October 7, 2016. A transmittal letter detailing a number of the CPG's significant disagreements with the directives imposed by the Region was delivered to the Region's LPR SharePoint on October 19, 2016. Region 2 requested that the CPG provide a hardcopy of the October 2016 revised Draft 17-mile BERA to the NJDEP on December 8, 2016 – two months after the revised Draft BERA was posted the Region's LPR SharePoint on October 7, 2016. The Region provided comments on the October 2016 version of the revised Draft 17-mile BERA on June 30, 2017. Region 2 and CPG met on July 24 to discuss the BERA comments and developed an Action Item list to facilitate the revision and anticipated delivery of a Revised 17-mile BERA in November 2017.

COPC Mapping - The CPG began discussions with the Region regarding COPC mapping in May 2013 with the submission of the "Lower Passaic River Surface Sediment Concentration Mapping Technical Memorandum". The CPG has attempted, but was unable to conduct significant and meaningful dialogue with the Region on COPC mapping between that time and early 2015. COPC Mapping is an integral part of the 17-mile RI/FS including the chemical fate and transport modeling and the identification and evaluation of remedial alternatives. Both the mapping approach and data density are consistent with mapping and data density at other large sediment sites such as the Hudson River, Fox River, and the Lower Duwamish. The Region and CPG representatives met on March 18, 2015 to discuss the CPG's mapping and agreed to follow-on discussions. The Region and the CPG agreed to meet on June 16, 2015 and the Region stated that it would provide its portion for the CPG's review in advance of the meeting. The Region provided its position paper on June 10, 2015. Due to the short-time frame and the complexity of the Region's responses, the CPG postponed the meeting. In a June 12, 2015 email, the CPG requested that the Region provide the underlying documentation for its June 10, 2015 position paper. The Region provided this material on July 20, 2015. The CPG submitted a response to the Region's position paper which was delivered in November 2015 and documents several significant shortcomings in the Region's analysis. The CPG met with Region 2 and USEPA Headquarters on January 27, 2016 to discuss this matter. The CPG Ms. J. LaPoma LPRSA RI/FS - Progress Report No. 124 – August 2017 September 15, 2017 Page 7 of 8

completed the action items identified during the February 17, 2016 COPC Mapping meeting and presented the refined COPC Mapping to Region 2 at an April 27, 2016 meeting. On September 20, 2016 more than 5 months after the April 2016 meeting, the CPG asked for and was given provisional approval to proceed with COPC mapping using conditional simulation; Region 2 promised to provide a written confirmation within 1-2 weeks. Region 2 provided preliminary approval of the conditional simulation mapping method on October 11, 2016. The CPG delivered a revised Draft RI Report Appendix J to detail the conditional simulation approach on February 9, 2017. The EPA and CPG had a brief discussion of using the COPC mapping to evaluate remedial benefit during the March 29, 2017 modeling meeting and a meeting was held on May 1, 2017. The Region provided additional comments on the revised Draft RI Report Appendix J on June 30, 2017. Region 2 and CPG conducted a teleconference on July 27, 2017 and resolved remaining mapping issues.

- Other Documents There are number of reports and technical memos (both original and revised submissions) that have been submitted to Region since 2011 that the CPG is awaiting either approval or Region 2's comments. These reports include:
 - 1. Upstream Reference Benthic Data Report submitted August 2013
 - 2. Background Sediment Data Report submitted October 2013

The CPG has received the Region's comments on a number of previously submitted data reports and revised and re-submitted them in November 2015. Please advise the CPG of the Region 2's schedule for action on these remaining documents. The CPG would like to discuss the EPA's August 29 email on these reports. It is unclear why EPA would not either (1) approve these data summary reports as it has for numerous other similar reports or (2) provide comments for the CPG to address and revise these two reports for final approval.

 17-mile RI/FS Schedule — The CPG plans to deliver the revised RI Report in December 2017 and is working with the EPA to refocus on the Upper 9 miles and accelerate its completion.

If you have any questions, please contact Rob Law or me at (908) 735-9315.

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Very truly yours,

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